

## **AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Original) In a database including primary and secondary servers and a data replicator that copies database log entries from the primary server to the secondary server and updates the secondary server using the copied database log entries, an indexing method including:
  - creating on the primary server a user-defined index of contents of the database, the user-defined index including at least user-defined routines and the creating including at least some operations that do not produce database log entries;
  - obtaining on the primary server a lock on the user-defined index;
  - constructing on the primary server a definitional data set containing information on the user-defined routines;
  - transferring the definitional data set from the primary server to the secondary server;
  - constructing on the secondary server secondary user-defined routines based on the definitional data set;
  - transferring contents of the user-defined index from the primary server to the secondary server as transferred contents, the transferred contents in combination with the secondary user-defined routines defining a secondary user-defined index

corresponding to the user-defined index created on the primary server; and  
removing the lock on the user-defined index.

2. (Original) The index method as set forth in claim 1, further including:  
transmitting an acknowledgement from the secondary server to the primary  
server indicating that the secondary user-defined index is defined, the removing of  
the lock being performed in response to the primary server receiving said  
acknowledgement.

3. (Original) The indexing method as set forth in claim 1, further including:  
registering the user-defined index with the secondary server.

4. (Original) The indexing method as set forth in claim 1, wherein the  
creating a user-defined index includes creating an R-tree index.

5. (Original) The indexing method as set forth in claim 1, further including:  
responsive to a failure of the data replicator and a subsequent restart of the  
data replicator, repeating the obtaining of a lock, the constructing and transferring of  
a definitional data set, the constructing of secondary user-defined routines, the  
transferring of contents of the user-defined index from the primary server to the  
secondary server, and the removing of the lock.

6. (Original) The indexing method as set forth in claim 1, further including:  
subsequent to the removing of the lock, performing database operations that

access the user-defined index on the primary server, database log entries corresponding to the database operations being copied by the data replicator from the primary server to the secondary server and the secondary server being updated using the copied database log entries and the secondary user-defined index.

7. (Original) The indexing method as set forth in claim 1, further including:  
initiating the data replicator subsequent to the creating of the user-defined index of contents of the database on the primary server, the obtaining of a lock, the constructing and transferring of a definitional data set, the constructing of secondary user-defined routines, the transferring of contents of the user-defined index from the primary server to the secondary server, and the removing of the lock being performed subsequent to the initiating of the data replicator.

8. (Original) The indexing method as set forth in claim 1, further including:  
initiating the data replicator, the initiating being performed prior to the creating of the user-defined index, the obtaining of a lock, the constructing and transferring of a definitional data set, the constructing of secondary user-defined routines, the transferring of contents of the user-defined index from the primary server to the secondary server, and the removing of the lock.

9-20 (Cancelled).